

# **AUTOMOTIVE GEAR OIL**

**Technical Data Sheet** 



# SYNGEAR FE LONG LIFE TRANSMISSION OIL

### PRODUCT DESCRIPTION:

Syngear FE is a fully synthetic fluid formulated to meet the extended drain interval requirements (540,000 km) set by ZF. It is specifically designed for use in all ZF commercial manual and automated gearboxes, including synchronized and non-synchronized systems. This fluid is suitable for extreme conditions of load, speed, and temperature. Additionally, it can be used in other manual transmissions requiring API GL-4 and is particularly well-suited for demanding applications with high loads and temperatures.

### APPLICATION:

Syngear FE is specifically designed for use in all ZF gearboxes, including those with or without Intarder, with an extended drain interval of up to 540,000 km. It is particularly well-suited for the latest ZF gearboxes with Carbon synchronization (ZF TE-ML 01E) and Molybdenum synchronization (ZF TE-ML 02E). This lubricant also meets the requirements of VOLVO 97307 (up to 400,000 km drain interval), MAN 341 type Z5 (up to 500,000 km drain interval) with or without Intarder, Retarder application VOITH CLASS C, MAN 341 type VR, and MB 235.28. Furthermore, Syngear FE is suitable for extended drain intervals in gearboxes of commercial vehicles from Renault Trucks, DAF, lveco, as well as for any commercial vehicle equipped with manual and automated gearboxes and applications requiring API GL-4 performance.

## FEATURES & BENEFITS:

- Excellent frictional characteristics with carbon, sinter bronze and molybdenum synchronizers provides improved shift quality and
  extends component life.
- Reduced cost of maintenance due to extended drain intervals.
- Excellent lubrication at low and high temperatures.
- · Excellent protection of gearboxes against wear and corrosion due to extreme-pressure properties of oil.
- Excellent low temperature fluidity due to a high Viscosity Index (min), generating benefits during cold starts and limiting drag losses and fuel consumption.
- Improved gear engagement.
- · Excellent thermal and oxidative stability extends the life of transmission and lubricant.

# PERFORMANCE LEVELS / MEETS OR EXCEEDS:

SAE GRADES	75W-80		
API	GL-4		
VOITH	CLASS C		
VOLVO	97305/ 97307		
MAN	341 E3/Z3/Z4/Z5		
MB	235.28		
ZF	TE-ML 01E/02E/16P/01L/02D/02L/16K/08		

### TYPICAL PROPERTIES:

PARAMETERS	ASTM	UNIT	SYNGEAR FE
			75W-80
KV@ 104°F /40°C	D7042	cSt	TBR
KV@212°F /100°C	D7042	cSt	9.4
Viscosity Index (min)	D2270	-	140
Density @15°C	D4052	g/cm3	TBR
Flash Point (min)	D92	°C	200
Pour Point (max)	D97	°C	-42
Brookfield Viscosity	D2983	ср	50,000(-40C)

#### DISCLAIMER:

The test data provided is not a final specification; rather, it serves as a guideline and may vary within acceptable production tolerances. Bravoil reserves the right to modify this test data. Any updates will supersede previous versions, so please refer to the most recent Technical Data Sheet (TDS).

#### HEALTH & SAFETY, ENVIRONMENT:

Prolonged and repeated contact with oil may cause skin disorders. Avoid contact. Wash immediately with soap and water. Do not discharge used oil in to drains or the environment. Dispose to an authorized used oil collection point. For further information on Safety Guidelines please refer to MSDS available on our website www.bravoil.ae

#### HEALTH & SAFETY:

This product is not likely to present any significant health or safety hazards when properly used in the recommended application and good standards of personal hygiene are maintained. Reference is made to the Safety Data Sheet (SDS) which is available on request via your local sales office or via the internet www.bravoil.ae

#### PROTECT THE ENVIRONMENT:

Take used oil to an authorized collection point. Comply with local regulation. Do not discharge into drains, soil or water.

#### STORAGE:

We recommend to store all packages under cover. In case outside storage is unavoidable, drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should never be stored above 60°C, exposed to hot sun or freezing conditions.

